

To: 2004 Water District 34 file

From: Jennifer Berkey



Date: June 30, 2004

On June 29, 2004, I called Brad Vande Kamp, the Hydrologic Technician from the USGS Idaho Falls Field Office who operates the Howell Gage. I inquired about the status of the gage and mentioned that I had notice a lot of noise in the gage recently, and that the 15-minute data had been adjusted resulting in some significant reductions in the discharge readings from the past few weeks. Brad stated that he had been to the site to make a routine measurement last week and had found that the gas bubbler sensor was reading 0.3-foot higher than the outside staff gage. He found that the outside staff gage was consistent with his measurement which was between 400 and 500 cfs. He made some adjustments to the gas bubbler sensor, but believes that it began to drift again within 2 days. Brad said that he has also been contacted by someone from the water district regarding the gage readings and the he plans to go back up on Friday to work on the gage. He expects the actual reading should be somewhere in the 400-500 cfs range and believes the sensor is again reading too high of a value.

On June 30, 2004, Tim Luke and I called Brad Vande Kamp, the Hydrologic Technician from the USGS Idaho Falls Field Office who operates the Howell Gage. Brad stated that his visit to the Howell Gage last week was on Tuesday (June 22, 2004). He stated that he adjusted the data from June 22 back to a date where he identified a jump in the data by applying a -0.3 foot gage shift to all of the 15-minute data. I asked him if he had done any smoothing of the peak data. Brad said that all he had done was apply a uniform gage shift, the smoother appearance of the data is just because the values are now in a different range on the rating curve. Brad said that he visited the Howell Gage again today (June 30, 2004) at about 11:30 AM. He replaced the line on the gas bubbler and hopes that will solve the problem. When he arrived today, the gas bubbler sensor was reading 0.2 foot higher than the outside staff gage. He stated that he has applied this gage height correction to the 15-minute data between June 22 and this morning. We should be able to see the corrected data on the USGS website as soon as it updates next, which will probably be between 4:30 PM and 5:00 PM. Brad stated that he is confident in the corrections made to the 15-minute provisional data on the website. Tim explained how IDWR and the water district use the data and how important this issue is to water users in the Big Lost River basin. Because IDWR will likely receive questions on this issue, Tim requested that he and his supervisor double-check the changes made to the data as soon as possible, preferably tomorrow.